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Malgorzata A. Brothers

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EXAMINER

LIANG, REGINA

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 09/10/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/938,772

**Applicant(s)**

BROTHERS ET AL.

**Examiner**

Regina Liang

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### *Claim Rejections - 35 USC § 103*

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Patton (US. PAT. NO. 4,852,057).

As to claim 1, Applicant's admitted prior art teaches a handheld device having a user interface capable of selection of mathematical object of a more complex mathematical object comprising a screen capable of display mathematical objects (screen 11 shown in Fig. 1) and a cursor (symbol inherent when screen is on to indicate a desired item on screen 11 in Fig. 1); a key panel having keys at least capable of selecting positions of the cursor and moving the cursor horizontally or vertically on the screen (directional keys located on top right or key panel shown in Fig. 1); a processor (processor 13 shown in Fig. 1) for executing programming that provides a user interface to allow a user to perform the following steps: a) scroll the cursor to a valid mathematical object in a historical display (Applicant's disclosure, page 1, lines 23-24).

However, Applicant's admitted prior art fails to expressly teach activating a sub-expression mode having a selection box.

Patton teaches activating a sub-expression mode having a selection box (select sub-expression menu in step 1209 shown in Fig. 12B, selection box 14 shown in Figs. 11N, 11O, 11Q, and see col. 9, line 53 to col. 10, line 59 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the apparatus of Applicant's admitted prior art then provide a selection box for sub-expression mode, as taught by

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Patton in order to obtain the apparatus of Applicant's admitted prior art modified by Patton, because it will provide capability to select and carry out an algebraic manipulation in a manner which precludes the possibility of error, as taught by Patton (col. 1, lines 65-68), and faster and simpler user input. This corresponds to the claimed steep activate a) sub-expression mode having a selection box. Note Patton also teaches step c) size and position the selection box over a valid object (the cursor 14 shown in Fig. 11N, 11O, 11Q is sized and positioned over a valid object such as "LN" or "+", symbols for cursor left and cursor right shown in Fig. 11P is used for positioning), and Applicant's admitted prior art teaches step d) copy the object (keys COPY and PASTE shown in Fig. 1).

As to claim 2, the handheld device of Claim, where in the processor is further programmed to size and position the selection box using only directional keys and modifier keys (Applicant's admitted prior art, directional keys shown in Fig. 1), also Patton teaches the cursor is sized shown in Figs. 11N, 11O and 11Q, symbols for cursor left and cursor right shown in Fig. 11P is used to positioning.

As to claim 3, the handheld device of Claim 1, wherein the processor is further programmed to paste the copied object (Applicant's admitted prior art teaches PASTE key shown in Fig. 1).

As to claim 4, the handheld device of Claim 3, wherein the processor is further programmed to allow the user to use the copied object in other mathematical applications (Applicant's admitted prior art, teaches COPY/PASTE keys shown in Fig. 1 which allow user to copy to any other screen location as needed).

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As to claim 5, Applicant's admitted prior art teaches a graphing calculator having a user interface capable of selection of mathematical object of a more complex mathematical object comprising a screen capable of display mathematical objects (screen 11 shown in Fig. 1) and a cursor (symbol inherent when screen is on to indicate a desired item on screen 11 in Fig. 1); a key panel having keys at least capable of selecting positions of the cursor and moving the cursor horizontally or vertically on the screen (directional keys located on top right or key panel shown in Fig. 1); a processor (processor 13 shown in Fig. 1) for executing programming that provides a user interface to allow a user to perform the following steps: a) scroll the cursor to a valid mathematical object in a historical display (Applicant's disclosure, page 1, lines 23-24).

However, Applicant's admitted prior art fails to expressly teach activating a sub-expression mode having a selection box.

Patton teaches activating a sub-expression mode having a selection box (select sub-expression menu in step 1209 shown in Fig. 12B, selection box 14, shown in Figs. 11N, 11O, 11Q, and see col. 9, line 53 to col. 10, line 59 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the apparatus of Applicant's admitted prior art then provide a selection box for sub-expression mode, as taught by Patton in order to obtain the apparatus of Applicant's admitted prior art modified by Patton, because it will provide capability to select and carry out an algebraic manipulation in a manner which precludes the possibility of error, as taught by Patton (col. 1, lines 65-68), and faster and simpler user input. This corresponds to the claimed step activate a) sub-expression mode having a selection box. Note Patton also teaches step c) size and position the selection box over a valid object (the cursor 14 shown in Fig. 11N, 11O, 11Q is sized and positioned over a valid object

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such as "LN" or "+", symbols for cursor left and cursor right shown in Fig. 11P is used for positioning), and Applicant's admitted prior art teaches step d) copy the object (keys COPY and PASTE shown in Fig. 1).

As to claim 6, the graphing calculator of Claim 5, wherein the processor is further programmed to size and position the selection box using only directional keys and modifier keys (Applicant's admitted prior art, directional keys shown in Fig. 1), also Patton teaches the cursor is sized in shown in Figs. 11N, 11O, 11Q, symbols for cursor left and cursor right shown in Fig. 11P is used for positioning.

As to claim 7, the graphing calculator of Claim 5, wherein the processor is further programmed to allow the user to use the copied object in other mathematical applications (Applicant's admitted prior art teaches keys COPY and PASTE shown in Fig. 1).

As to claim 8, the graphing calculator of claim 5, wherein the processor is further programmed to allow the user to use the copied object in other mathematical applicants (Applicant's admitted prior art teaches keys COPY and PASTE shown in Fig. 1).

As to claim 9, Applicant's admitted prior art discloses a software user interface for a graphing calculator having an input display (software user interface residing in memory 14 executed by processor 13 as shown in Fig. 1, graphing calculator having screen 11 shown in Fig. 1 of Applicant's disclosure, Fig. 1) with mathematical objects which allows a user to perform the following steps: a) scroll a cursor to a mathematical object in a history display (Applicant's disclosure, page 1, lines 23-24).

However, Applicant's admitted prior art fails to expressly teach activating a sub-expression mode having a selection box.

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Patton teaches activating a sub-expression mode having a selection box (select sub-expression menu in step 1209 shown in Fig. 12B, selection box 14 shown in Figs. 11N, 11O, 11Q, and see col. 9, line 53 to col. 10, line 59 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the apparatus of Applicant's admitted prior art then provide a selection box for sub-expression mode, as taught by Patton in order to obtain the apparatus of Applicant's admitted prior art modified by Patton, because it will provide capability to select and carry out an algebraic manipulation in a manner which precludes the possibility of error, as taught by Patton (col. 1, lines 65-68), and faster and simpler user input. This corresponds to the claimed step activate a) sub-expression mode having a selection box. Note Patton also teaches step c) size and position the selection box over a valid object (the cursor is sized and positioned over a valid object such as "LN" or "+" shown in Fig. 11N, 11O, 11Q, symbols for cursor left and cursor right shown in Fig. 11P is used for positioning), and Applicant's admitted prior art teaches step d) copy the object (keys COPY and PASTE shown in Fig. 1).

As to claim 10, the user interface of Claim 9, wherein the processor is further programmed to allow the user to use the copied object in other mathematical applications (Applicant's admitted prior art teaches keys COPY and PASTE shown in Fig. 1).

As to claim 11, the user interface of Claim 9, wherein the processor is further programmed to allow the user to use directional keys to size and position the selection box over any object of the more complex mathematical object (Applicant's admitted prior art teaches keys COPY and PASTE shown in Fig. 1).

***Response to Arguments***

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3. Applicant's arguments filed 7/14/03 have been fully considered but they are not persuasive.

Applicant's remarks regarding Patton on pages 2-3 are not persuasive. The cursor 14 shown in Figs. 11N, 11O, and 11Q is a editor cursor which has a selection box, wherein the selection box is sized and positioned over a valid object such as "LN" or "+" to allow the user to rearrange an algebraic expression or equation according to standard rules of mathematics.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., changing the cursor size to select a sub-expression) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

#### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.




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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
REGINA LIANG  
PRIMARY EXAMINER  
ART UNIT 2674

RL  
9/9/04